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Preface

Europe was one of the cradles of the cartography in the ancient times. This tradition was maintained during the industrial age, when the large kingdoms and empires of the continent developed their own topographic map systems. Later, the compilation of the cadastral maps brought a new momentum to this process.

Georeferencing is an important service of the modern geographic information systems (GIS). It is a method to define the position of the map objects in a well-defined coordinate system, and it needs the solutions offered by geodesy, geophysics and cartography. The procedure allows an accurate positioning of even somewhat distorted scanned historical maps, if appropriate information is available to reconstruct their spatial context. Georeferred old maps enable the researchers to develop their studies mainly in two directions:

— the accuracy analysis of the old cartographic products, and

— the virtual reconstruction of the environment depicted in the maps.

This special issue contains a collection of the results of different European, mostly Central European research groups in these specific fields. Székely (pp. 3–16) shows a late Renaissance map of Hungary and analyses its accuracy and reliability to draw conclusions on environmental changes in the Pannonian Basin. Gercsák (pp. 17–26) and Zlinszky and Molnár (pp. 79–94) discuss bathymetric maps, of the Gulf of Lion at the French Riviera and of the Lake Balaton in the Pannonian Basin, presenting new considerations concerning the technology of the surveys. Pettersen (pp. 67–78) provides an interesting description of the development of an early geodetic network in Norway.

Most papers of this issue discuss the cartographic products of the Habsburg map makers and military surveys. Krejči and Cajthaml (pp. 27–38) shows the accuracy of the Müller map systems of the first half of the 18th century in Bohemia, while Krejči et al. (pp. 39–48) analyses the possible relation between this and the First Military Survey taken about half a century later. Podobnikar (pp. 49–66) shows the application of the First Military Survey sheets in reconstruction of the old landscapes in a mountainous region of Slovenia.

Papers of Čada and Vichrová (pp. 105–114) and Timár (pp. 95–104) discuss the relation between the Habsburg Second Military Survey and the cadastral works of the same regions, the Czech lands and Tyrol and Salzburg, respectively. Both Molnár and Timár (pp. 115–120) and Čechurová and Veverka (pp. 121–130) provide, however different, solutions to the georeference of the Third Military Survey trapezoid sheets, while the latter authors also analyse the later usage of these maps by

the Czechoslovak cartography. Galambos (pp. 131–140) provides a short overview of the history of the Hungarian geological maps. Gede (pp. 141–148) described the method of building a computer-based system for georeferring of old globes and making a virtual showroom of them, thus making the valuable heredity available for the global community.

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